

REMARKS

Claims 1-50 were pending in this application. Claims 1 and 25 have been amended. Claims 51-54 have been added.

Claims 49 and 50 rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which application regards as the invention. Claim 49 has been amended to include the further limitation of an elastomeric layer, providing antecedent basis for any subsequent recitations of the elastomeric layer. In addition, claim 53 has been added as claim 49 rewritten into an independent claim. No new matter has been added by these amendments. Applicant respectfully requests withdrawal of this rejection.

Claims 1-5, 8-20 and 22-24 were rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,712,860 B2. A Terminal Disclaimer is being filed herewith with respect to this commonly owned patent to overcome this rejection. Applicant respectfully requests withdrawal of this rejection.

Claims 1-4, 8-10, 14, 15, 25-27, 33, 38, 39, 42-44 and 47 stand rejected under 35 U.S.C. §102(b) as being anticipated by Merlette (U.S. Patent No. 4,959,073). Claims 1, 3, 4, 8, 10, 11, 14, 15, 23 and 24 stand rejected under 35 U.S.C. §102(b) as being anticipated by Phillips (U.S. Patent No. 5,800,569). Claims 1-7, 10, 12-16, 18, 20 and 21 stand rejected under 35 U.S.C. §102(b) as being anticipated by Herr et al. (U.S. Patent No. 5,701,686). Claims 25-34 and 38-41 stand rejected under 35 U.S.C. §102(b) as being anticipated by Mosler et al. (U.S. Patent No. 6,767,370). Claims 25, 26, 28-33, 39-41, 47 and 48 stand rejected under 35 U.S.C. §102(b) as being anticipated by Chen (U.S. Patent No. 5,507,838). Claims 17 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over the Herr patent.

Claim 1 has been amended to recite that the lower foot plate and the upper foot plate are disposed in a generally uniform spaced relationship to each other along the length of the

upper foot plate. In addition, the claim has been amended to clarify that the elastomeric layer extends substantially over the upper surface of the lower foot plate. No new matter has been added by these amendments.

The Office Action asserts that the Merlette patent discloses a lower leg prosthesis having a the recited features of claim 1. In particular, the Action asserts that Merlette's prosthesis includes a lower foot plate spaced from an upper foot plate, and an elastomeric layer attaching the lower and upper foot plates, with the elastomeric layer extending substantially across an upper surface of the lower plate. Amended claim 1 now clarifies that the upper and lower plates are spaced apart in a generally uniform spaced relationship along the length of the upper plate. In Merlette, the upper plate (16) is not generally uniformly spaced from the lower plate 20. Instead, the upper and lower plates are joined together at the toe tip (18) and gradually diverge toward the heel tip (22). [Col. 3, lines 50-58]. In addition, the resilient material (24) does not extend substantially over the upper surface of the lower plate. Instead, it ends about half-way along the lower plate at (26), "the point of departure from the resilient material," leaving the remainder of the lower plate to the heel tip (22) devoid of such material. [Col. 4, lines 25-50]. Therefore, Merlette fails to anticipate or render unpatentable amended claim 1, and thus the Applicant respectfully requests withdrawal of this rejection. In like manner, claims 2-24 and new claim 54 depend from allowable amended claim 1, and thus are allowable for at least the same reasons.

Claim 25 has been amended to recite that the lower leg prosthesis includes a curved upper foot plate having a length, the upper plate configured to be flexible in a longitudinal direction; a lower foot plate disposed below and coupled to the upper foot plate, the lower foot plate including a heel portion for accommodating heel strike and having a length at least about the length of the upper foot plate; and an attachment device mounted to the upper foot plate and adapted for connection to an external prosthetic component, the attachment device including a lower surface that generally conforms to a sloping portion of the upper foot plate. No new matter has been added by these amendments.

The Office Action asserts that Merlette discloses a lower leg prosthesis having the features of claim 25. In particular, the Action asserts that the prosthesis includes a curved upper plate, a lower plate and an attachment device (14; 82) coupled to the upper plate (16;84). Amended claim 25 now clarifies that the attachment device is mounted to the upper foot plate. In Merlette, the asserted attachment device (14; 82 [should it be 86?]) is the ankle portion of the main member 10 and occurs between the toe portion (16; 84) and the leg portion (12; 82). The ankle portion is not mounted to the upper foot plate, or the toe portion (16; 84), but is instead a designated area of a single component (10). It is to be noted that the prosthesis in Fig. 9 is actually formed from a single pipe with one side of the lower portions removed and the remaining side flattened. Therefore, Merlette fails to anticipate or render unpatentable amended claim 25. Applicant respectfully requests withdrawal of this rejection. In like manner, claims 26-50 depend from allowable amended claim 25, and thus are allowable for at least the same reasons.

The Office Action also asserts that the Phillips patent discloses a lower leg prosthesis having a the recited features of claim 1. In particular, the Action asserts that the prosthesis (100) includes a lower foot plate (110) spaced from an upper foot plate (112) and an elastomeric layer (114) that extends substantially across the upper surface of the lower plate. Amended claim 1 clarifies that the elastomeric layer extends substantially over the upper surface of the lower foot plate. In Phillips, the ankle block (114) does not extend substantially over the upper surface of the foot plate (110). Instead, it only extends about 2/3 of the length of the foot plate. It is described as having a "lower surface (142) that is longer than its upper surface (140) and generally corresponds to the contour and size of the arch region (138) of the foot plate (110)." [Col. 7, lines 15-20]. The arch region (138) is formed between the heel (134) and toe (136) ends of the foot plate (110). [Col. 6, lines 49-56]. Therefore, the Phillips patent fails to anticipate or render unpatentable amended claim 1, and thus the Applicant respectfully requests withdrawal of this rejection. In like manner, claims 2-24 and new claim 54 depend from allowable amended claim 1, and thus are allowable for at least the same reasons.

The Office Action asserts that the Herr et al. patent discloses a lower leg prosthesis having the recited features of claim 1. In particular, the Action asserts that Herr's prosthesis (Fig. 22) includes a lower foot plate spaced from an upper foot plate, and an elastomeric layer (25, 27) attaching the lower and upper foot plates, with the elastomeric layer extending substantially across an upper surface of the lower plate. Amended claim 1 now clarifies that the upper and lower plates are spaced apart in a generally uniform spaced relationship along the length of the upper plate. In Herr, Fig. 22 shows a three coupled spring sole system, including a sole or bending beam 17 connected to another bending beam 15 in a V shape at a coupled region 21 at the heel (shown in Fig. 8b). In Fig. 22, the sole 17 is extended into a full foot length upper plate with a bending beam 15 at one end and a similar bending beam 61 connected at a fore end 59. Neither bending beam 15 nor 61 are spaced apart from the sole 17 in a generally uniform spaced relationship along the length of the sole. Instead, the two bending beams are connected to the sole forming a V-shaped spring. Therefore, Herr et al. fails to anticipate or render unpatentable amended claim 1, and thus the Applicant respectfully requests withdrawal of this rejection. In like manner, claims 2-24 and new claim 54 depend from allowable amended claim 1, and thus are allowable for at least the same reasons.

The Office Action further asserts that the patent to Mosler et al. discloses a lower leg prosthesis having the features of claim 25. In particular, the Action asserts that the prosthesis includes a curved upper plate (10), a lower plate (24) and an attachment device (4) coupled to the upper plate (see Fig. 7). Amended claim 25 now clarifies that the lower foot plate includes a heel portion for accommodating heel strike and has a length at least about the length of the upper foot plate and that the attachment device is mounted to the upper foot plate. In Mosler, an artificial foot includes a forefoot spring (3) having two leaf springs (9, 10) joined at an end A and spaced apart by a pressure pad (11). This forefoot spring is attached to a heel spring (24) joined to the forefoot spring at 24a. The foot also includes an adapting device 12 connected between the end 24b of the heel spring and the end B of the forefoot spring. An adapter 4 is screwed to the forefoot spring. Mosler's foot does not include a lower foot plate that has a length at least about the length of the upper foot plate.

Instead, Mosler's heel spring (24) is only about half the length of the forefoot spring. Therefore, Mosler et al. fails to anticipate or render unpatentable amended claim 25. Applicant respectfully requests withdrawal of this rejection. In like manner, claims 26-50 depend from allowable amended claim 25, and thus are allowable for at least the same reasons.

Finally, the Office Action asserts that the patent to Chen discloses a lower leg prosthesis having the features of claim 25. In particular, the Action asserts that the prosthesis includes a curved upper plate (40,41), a lower plate (30,31) and an attachment device (4; 42) coupled to the upper plate (see Figs. 4, 5). Amended claim 25 now clarifies that the lower foot plate includes a heel portion for accommodating heel strike and has a length at least about the length of the upper foot plate and that the attachment device is mounted to the upper foot plate. In Chen, an artificial foot includes a flexible muscle member (3) disposed inside a foot-shaped casing (5). This member includes an upwardly protruding curved section (32) mounted on a positioning projection (51) and first front and rear sections (30, 31) which extend forwardly and rearwardly from curved section. Muscle member (3) is a one-piece plate. A stop member (4) includes a weight bearing section (42) and a curved bottom part (401) positioned over the curved section (32). The stop member (4) also includes a front section (40) extending downward and frontward and a rear section (41) extending downward and rearward between first rear section (31) and weight bearing member (42). If stop member (4) and weight bearing member (42) are considered the attachment device (4; 42), then the attachment device is not mounted to the upper plate. Instead, it is integrally formed with the front and rear sections (40, 41). However, if the un-numbered knob or connector connected on top of the weight bearing member (42) is considered the attachment device. Then the attachment device does not have a lower surface that generally conforms to a sloping portion of the upper foot plate. Therefore, Chen fails to anticipate or render unpatentable amended claim 25. Applicant respectfully requests withdrawal of this rejection. In like manner, claims 26-50 depend from allowable amended claim 25, and thus are allowable for at least the same reasons.

The Office Action also asserts that claims 17 and 24 are unpatentable over Herr et al. As stated above, claims 17 and 24 depend from allowable amended claim 1, and thus are allowable for at least the same reasons. Therefore, the Applicant respectfully requests withdrawal of this rejection.

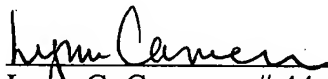
Claims 35-37 and 45-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims.. Claims 49 and 50 would be allowable if rewritten to overcome the rejection under 35 U.S.C. §112, second paragraph and to include all of the limitation of the base claim and any intervening claims.

Claim 35 has been rewritten in independent form as new claim 51, and claim 45 has been rewritten as new claim 52. As stated above, claim 49 has been rewritten in independent form as new claim 53. Therefore, Applicant respectfully requests withdrawal of the objections and allowance of these claims.

Accordingly, all of the claims remaining in this application, claims 1-54, should now be seen to be in condition for allowance. A prompt notice to that effect is respectfully solicited. If there are any remaining questions, the Examiner is requested to contact the undersigned at the number listed below.

Respectfully submitted,

RUBIE et al.

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